

## CLAIMS

1. An examination method conducted for the administration of an anticancer drug targeting a tumor-associated factor receptor, in order to evaluate usefulness of treatment with the anticancer drug, comprising, in addition to the examination of the gene and/or the expressed product thereof of the receptor, the examination of the gene and/or the expressed product thereof of a substance interacting with the receptor on the surface of and/or within the cell membrane.

2. The examination method according to Claim 1, wherein the tumor-associated factor receptor is a cell growth factor receptor.

3. The examination method according to the Claim 2, wherein the cell growth factor receptor is an epidermal growth factor receptor or a receptor belonging to an epidermal growth factor receptor family.

4. The examination method according to Claim 3, wherein the receptor belonging to the epidermal growth factor receptor family is HER2/c-erbB-2.

5. The examination method according to any one of Claims

1 to 4, wherein the substance interacting with the receptor on the surface of and/or within cell membrane is a glycoprotein.

6. The examination method according to Claim 5, wherein the glycoprotein is a mucin.

7. The examination method according to Claim 6, wherein the mucin is mucin 4 (MUC4).

8. The examination method according to any one of Claims 1 to 7, wherein the anticancer drug is an antibody to the receptor.

9. The examination method according to Claim 8, wherein the antibody is a humanized monoclonal antibody.

10. The examination method according to Claim 9, wherein the humanized monoclonal antibody is trastuzumab (Herceptin<sup>TM</sup>).

11. A reagent for use in the examination method according to any one of Claims 1 to 10.

12. A reagent kit for use in the examination method according to any one of Claims 1 to 10.